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ABSTRACT

The publication is intended for students and parents of students preparing to enter secondary school in Ontario. Its objectives are to describe, simply and clearly, the choices open to students as they advance to secondary school, and relate secondary school courses to opportunities at the postsecondary level. (Author/MSE)

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After 8?

A guide for Grade 8 students and their parents

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Ontario Ministry of Colleges and Universities

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Ontario Ministry of Education
Ministry of Colleges and Universities

Introduction

This publication is intended for students who are preparing to enter secondary school, and for their parents.

The educational welfare of students is a concern shared by teachers and guidance counsellors, and by the Ontario Ministry of Education and the Ministry of Colleges and Universities.

In view of the complexity of Ontario's educational structures and the number of choices and opportunities available to students, this booklet aims to:

- describe, clearly and simply, the choices open to students as they advance from Grade 8 to secondary school;
- relate, in a general way, secondary school courses to opportunities at the post-secondary (beyond high school) level.

The educational partnership developed among parents, the student, and the school depends for continued success on the student being prepared for secondary school and post-secondary education, and on parents understanding today's educational systems and programs and being able to assist their sons and daughters in making decisions concerning their education.

Local secondary schools organize information sessions specifically for parents and guardians of Grade 8 students, in order to explain their programs. They provide information on their programs and guidance counsellors advise students on the course of studies best suited to their needs, aptitudes, and interests. Sessions are also held at community colleges and universities to explain their respective programs, and group visits to these institutions can be arranged.

It is recognized that many students will choose to enter the work force directly from secondary school. Many secondary schools provide selected training for young men and women to develop skills that prepare them for the work force or for entry to apprenticeship programs.

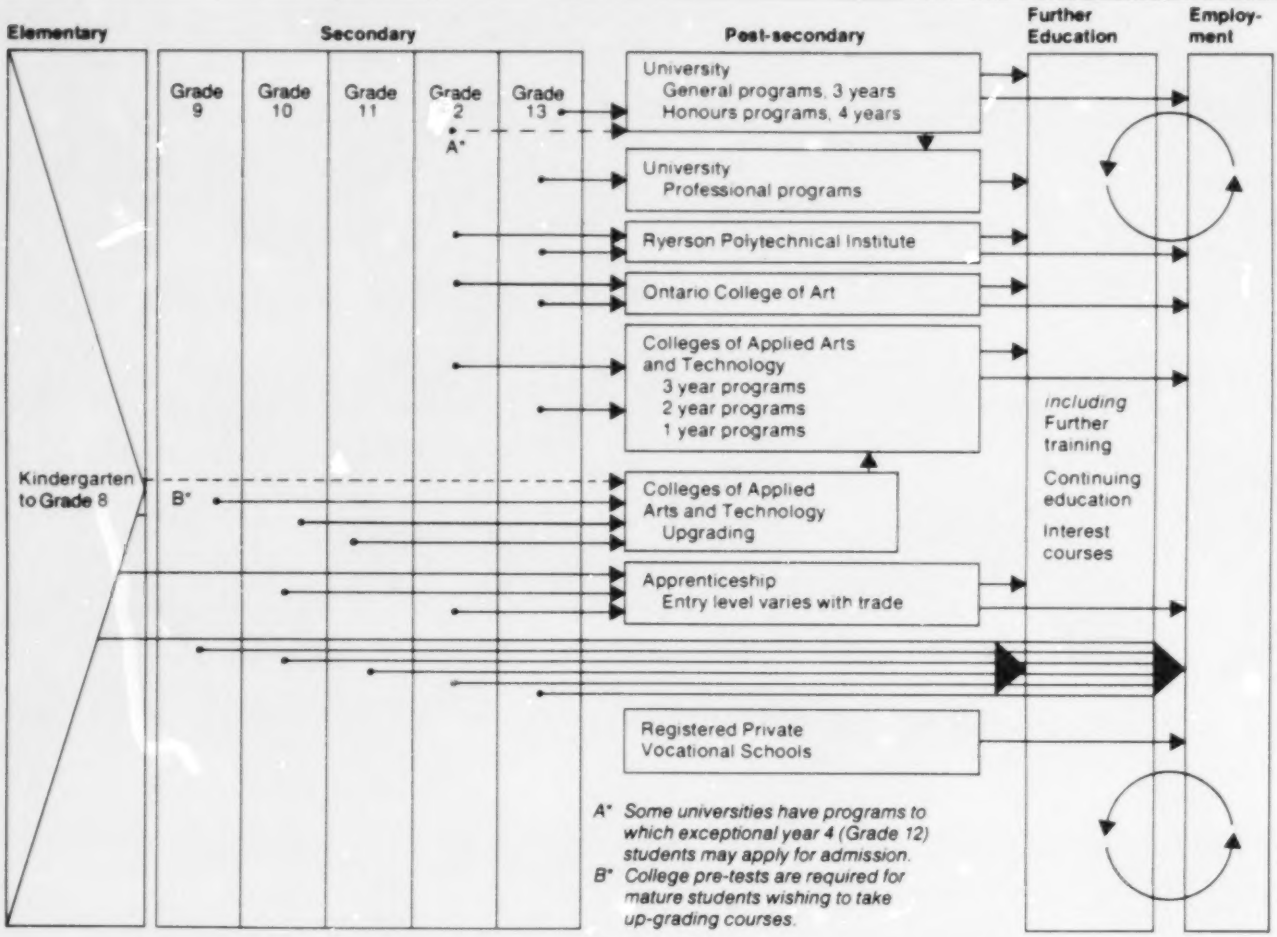
Further information about programs can be obtained from secondary school teachers or counsellors. A list of selected reference publications useful to both parents and students is included in this booklet (page 19). These publications are normally available in secondary school guidance information centres or from the sources listed under the entries.

December, 1977

Copies of *After 8?* can be obtained free of charge, in either French or English, from:

Information Resources Branch
Ministry of Colleges and Universities
Mowat Block, Queen's Park
Toronto, Ontario M7A 1B8
Telephone (416) 965-6134
OR
Communication Services Branch
Ministry of Education
14th Floor, Mowat Block
Queen's Park
Toronto, Ontario M7A 1L2
Telephone (416) 965-6407

Minimum Entry Requirements for Post-Secondary Education



Today's Secondary Schools

How has high school education changed?
Today's educational system is more flexible that it was several years ago and the requirements for a secondary school diploma have changed. Students may choose from a greater variety of courses in order to obtain their diplomas. We used to talk about Sarah passing her year and Richard passing all his subjects; now we talk of the number of credits Sarah and Richard earned this year. It should be noted, however, that students have to include in their programs a certain number of required courses. Details about compulsory subjects are found on page 5.

What is a credit?
Each course is worth a certain number of credits – usually one full credit per course. A student earns a credit by successfully completing a course for which a minimum of 110 hours of class time has been scheduled.

Are all courses equally difficult?
Subjects are taught at different degrees of difficulty in different years. Each school board indicates the difficulty of a course in a different way. Course descriptions provided at the local level should contain this information. The local secondary school will be able to help you understand the terminology used to describe course difficulty.

How can students avoid making mistakes in subject choices?
The credit system provides an excellent opportunity for students, together with parents and school personnel, to plan an ongoing educational program. Since course selection will tend to have long-range implications, students should consult teachers, guidance counsellors, and others to discuss the consequences of taking one particular subject as opposed to another. The choice of various individual courses is left to parents and students. However, teachers, principals, and guidance counsellors have an obligation to offer advice on the combination of courses selected to ensure that it will best prepare their students to meet individual career goals. For examples, see the Career Areas Chart on page 11.

How do students choose courses that are most appropriate for them?
Advice from teachers, counsellors, and the principal of the elementary school should be sought when selecting courses. They are the ones who see students regularly and can tell how difficult or easy certain subjects will be for particular students. They can recommend subjects that will be best suited to individual students and their career goals and ensure that the diploma requirements with regard to required subjects and areas of study are met. A review of previous report cards is another good indicator. When trying to develop a program of studies that can be handled successfully, the insight and direction of these professionals will be beneficial to the students.

Recent legislation gives parents the right to see student record folders. These folders may provide further indications of students' abilities, interests and potential.

The Secondary School Graduation Diploma (SSGD)
This is the diploma awarded to a student who has successfully completed courses worth a minimum of 27 credits. Most students earn up to seven or eight credits a year and obtain the required 27 credits toward their SSGD in a period of four years, that is, Grades 9 to 12. A student entering secondary school in September 1978 must include certain required subjects within his or her program. These include:

In Grades 9 and 10	
English	2 credits
Mathematics	2 credits
Science	1 credit
Canadian History	1 credit
Canadian Geography	1 credit
	7 credits
In Grades 11 and 12	
English Studies	2 credits
Total:	9 credits

In addition to these required credits, 18 further credits drawn from the four areas of study are needed for graduation. Students are required to select courses that, together with the required subjects listed above, total a minimum of 3 credits from each of the four areas of study:

- Communications
- Social and Environmental Studies
- Pure and Applied Sciences
- Arts

Students may choose, especially in Grades 11 and 12, to concentrate their credits in certain areas depending on their interests and long-range plans (for example, business education, languages, science, technology, art).

Limitations of space, staff, and financing may make it impossible for an individual school to offer all subjects. The following list provides a sample of the courses available and indicates how some of the subjects available in the schools might be placed in the four areas of study. It is by no means exhaustive.

The 4 Areas of Study

Communications
- Data Processing
- Drafting
- English
- Français
- French
- German
- Latin
- Shorthand
- Typewriting

Social and Environmental Studies
- Career Development
- Economics
- Family Studies (Home Economics)
- Geography
- History
- Retail Merchandising
- Urban Studies
- World Religions

Pure and Applied Sciences
- Accounting
- Auto Mechanics
- Data Processing
- Elements of Technology (construction, electronics, machine shop)
- Horticulture
- Industrial Arts
- Mathematics
- Science
- Space and Man

Arts
- Art
- Dramatic Arts
- Family Studies (Home Economics)
- Floriculture
- Graphic Arts
- Music
- Physical and Health Education
- Screen Education

How important are the choices?
It must be stressed that choices need to be thought out and discussed thoroughly. It is never too soon to start. It is not essential and may not even be desirable for a student entering high school to be committed to a career and take only those courses related to that career. It is important to discuss and consider all possibilities, and choose subjects that will provide an appropriate educational background without limiting the student. Students should leave themselves open to various career possibilities. It is also desirable for students to consider taking a course that will provide them with a marketable skill by the time they graduate.

The Secondary School Honour Graduation Diploma (SSHGD)
This diploma is awarded to a student who has earned a minimum of six Grade 13 credits following (in most cases) the completion of the Secondary School Graduation Diploma (27 credits). Normally the Honour Graduation Diploma takes five years to complete, but it is possible for a student to complete the requirements in less than five years.

What credits are required?
Students planning to take Grade 13 courses are well advised, in the early years of secondary school, to take as many credits as possible at advanced levels to ensure success in Grade 13.

Although a student can earn an honour diploma by completing any six Grade 13 credits, many college and university programs require specific credits and a good academic standing in addition to the diploma.

For up-to-date information, check with the Student Guidance Information Service (SGIS), post-secondary calendars, and other publications in the school's guidance library. *Horizons*, published by the Ministry of Colleges and Universities, is the most widely circulated and consulted publication of its kind.

What selection is offered?
Various credit courses now offered at the Grade 13 level are designed to equip students for post-secondary studies and activities. Courses offered at this level have a maximum value of either one or two credits, and can be selected in various combinations to equal the six required credits.

The choice of honour graduation subjects and their maximum credit value varies. The following subjects may not be offered by all secondary schools, but the list gives some indication of possible subject choices.

Maximum value of 1 credit
- Accountancy Practice
- Algebra
- Biology
- Calculus
- Chemistry
- Economic Reasoning
- Geography
- History
- Home Economics (Canadian Family in Perspective)
- Mathematics of Investment
- Music
- Physics
- Relations and Functions
- Secretarial Practice
- Visual Arts

Maximum value of 2 credits
- Anglais*
- English
- Français
- French
- German
- Greek
- Italian
- Latin
- Russian
- Spanish

Courses requiring Ministry of Education approval
- Classical Studies
- Consumer Studies
- Dramatic Arts
- Environmental Science
- Law
- Man in Society
- Man, Science, and Technology
- People and Politics
- Physical Education
- Screen Education
- Space and Man
- Urban Studies
- World Religions

* As taught to French-speaking students in schools or classes where French is the language of instruction.

Available Opportunities for Occupational Programs
Occupational programs often combine job-situation training in the school with periods of actual on-the-job work experience. They are designed to equip students with skills that are in demand in the current labour market. Opportunities are open both for jobs and for further training.

Students completing successfully one or more years of a secondary school Occupational Education program receive a Certificate of Training. Most courses in the occupational program have credit value and may be used to complete the requirements for the Secondary School Graduation Diploma.

After two years of an occupational program, some students go on to apprenticeship training and begin earning while they learn the basic skills of a trade. Others continue working towards a Secondary School Graduation Diploma.

Vocational training offered in secondary schools includes a pre-vocational approach for those intending to seek employment immediately after graduation, integrated studies of various technologies intended to assist students in choosing a post-secondary program, and vocational courses intended to satisfy general or introductory interest in this area.

For a number of students in Ontario vocational and occupational programs provide interest and incentive in preparing for jobs or for further education.

The next section, *Alternatives and Variations*, contains various suggestions for students who wish to join the labour market and are at the same time interested in continuing their studies.

Are there any secondary school programs which include on-the-job work experience?

Work-experience programs
Work experience is becoming an integral part of an increasing number of secondary school courses. A student taking a course that includes a work-experience component usually spends one or two weeks during the school year in business or industry, where on-the-job activities reinforce specific aspects of the in-school course.

The time spent in work experience provides students with opportunities to observe real work situations in their chosen area of interest, and to apply theories and practical skills learned at school.

Co-operative education
Co-operative education for credit combines education that is available in the community with education available in the school.

Co-operative education, although similar to work experience, differs in two fundamental ways. First, in co-operative education, scheduled periods of time are usually spent in the out-of-school environment throughout the entire school year. These out-of-school activities must not exceed one-third of the time scheduled for a credit. Second, certain components of a learning experience are provided by the school, while other components are covered by the co-operating body.

All new learning is consolidated by the school at regular intervals throughout the year. Through co-operative courses, academic and business or technical programs are expanding as students become better acquainted with the world of work.

What special features does our system of education reflect?
Our system of education illustrates the Ministry of Education's philosophy of partnership among parents, students, and the school. Educational planning for the individual student is seen as the primary responsibility of the family; the provision of the necessary educational framework is the primary responsibility of the school system. Of course, the system is constantly evolving and is faced with new challenges and needs such as:

- maintaining a sense of unity similar to the old sense of school pride in spite of individual timetables, subjects taken at different levels, and different classmates each period;
- maintaining standards of achievement that are meaningful to parents and employers;
- helping New Canadian parents to understand the school system and to ensure that it provides for their particular needs;
- ensuring that both male and female students are aware of the full range of possibilities available in schools;
- extending guidance and counselling services to parents and encouraging them to participate in the educational partnership.

Alternatives and Variations

What educational possibilities exist outside the regular secondary school?

You may be surprised to learn that there are a number of variations to the educational pattern described above. Some are combined with regular programs, while others are substitutes for regular programs. All provide recognized credit courses. While the following information may not have immediate application, it may prove generally helpful in planning for the years ahead.

Correspondence courses

These are provided free of charge by the Ministry of Education to eligible Ontario residents. Students in the senior years of secondary school may also enrol, with the principal's permission. These courses, which may be started at any time of the year, are ideal for persons able to work independently and desiring to learn at their own speed. Further information is available from:

Correspondence Education Branch
Ministry of Education
909 Yonge Street
Toronto, Ontario M4W 3G2
Telephone: (416) 965-2657

Night School

The main purpose of evening courses is to provide adult students with opportunities for continuing their education. Day students who wish to supplement or complement their daytime program may enrol in night school.

However, these programs are not suitable for all students. The onus to learn and study is on the student and there is less direct pressure to perform. It is assumed that the adult student is there because he or she wants to learn. The resulting atmosphere, which is responsible and mature, is conducive to learning for some teenagers, while others might find it constricting.

In addition to credit courses, many night schools offer attractive non-credit courses for personal interest or enrichment. Many regular secondary school students pursue hobbies through such courses. However, a student with a full day-school program should be cautious about assuming additional studies. Your local school board or secondary school can provide further information.

Summer school

Summer school courses were originally set up to enable students to repeat subjects required for promotion to the next grade. Programs have now been expanded to include general credit and personal interest and recreational courses. It is possible to accumulate credits at summer school in order to complete the requirements for the Ontario secondary school diplomas (graduation or honour graduation) in less than four or five years. Some above-average students may wish to do so for personal reasons. Ideally, summer study programs should be carefully discussed with the school personnel.

Your local school board or secondary school can provide further information.

Private schools

There are over 200 private schools across the Province of Ontario. Such schools are not supported by tax monies in any way, but by student fees and financial endowments from private individuals and firms. Many offer programs leading to the Secondary School Graduation Diploma and the Secondary School Honour Graduation Diploma. Each school intending to grant diploma credits has to request inspection by the Ministry of Education.

Some private schools are residential; others enrol day students only. Costs can be high, especially for students attending residential schools.

These schools, of course, tend to vary. Some emphasize strict discipline; other lean towards free expression. Sports, the creative arts, or a religious emphasis are stressed to differing degrees, depending on the school. A list of private schools is available from:

Communication Services Branch
Ministry of Education
Mowat Block, Queen's Park
Toronto, Ontario M7A 1L2
Telephone: (416) 965-6407

Alternative schools (free schools)

There has been a good deal of interest expressed by students, parents, and the news media in alternatives to the regular school system.

Some concerned students, parents, and teachers have initiated small private and public school alternatives with different styles and structures.

For information about proposing a publicly funded school, contact your school board or Director of Education. *Life Option Catalogue* is a publication that provides a list of alternative schools in Ontario, both primary and secondary. It is available from:

Communitas Exchange
Harbourfront
235 Queen's Quay West
Toronto, Ontario M5J 1A6

Opportunities for Students Who Wish to Return to Secondary School to Complete Their Diplomas

Temporary breaks from formal education

Remember when the drop-out was considered a failure by the school system and by society? Things have changed, and it is becoming more acceptable to discontinue formal education for a period of time in order to work or travel, and then "drop back in". This trend is common at both the secondary and the post-secondary levels, and has prevented many drop-outs from becoming disillusioned. A temporary break from school may make it possible to return as a more mature, interested, and successful student.

Attendance regulations now permit parents to apply for early school leaving for children aged 14 or 15. Such students will be required to carry on a program prescribed by the Early School Leaving Committee. For further information, consult your secondary school principal or guidance office.

Part-time work and part-time study

Because of the flexibility of our secondary school system, some students can and are willing to stretch out their schooling in order to maintain their financial independence or contribute to their family's income. Of course, there will always be some students who can both attend a full-time program and work at a part-time job. Others may prefer to combine work with part-time day school, summer school, correspondence courses, or night school.

Adult day schools

Some school boards have established adult day schools for people over 18 who wish to return to school. The atmosphere in such schools is similar to night school classes and therefore is appealing to many mature students.

Consult your school board or local secondary school for further information.

Credits for mature students

Adults returning to high school to complete their diplomas, following an absence from school of at least one year, can now be granted credits for courses taken outside the regular school program and for work experience.

For further information, consult your school board or local secondary school, or obtain a copy of *Credit for the School of Hard Knocks* from:

Communication Services Branch
Ministry of Education
Mowat Block, Queen's Park
Toronto, Ontario M7A 1L2
Telephone: (416) 965-6407

Planning a School Program

Choosing a high school and planning a program
Students will likely attend a neighbourhood secondary school much as their parents did. Most of these schools have programs that are broad enough to accommodate their needs. On special nights set aside for parents of Grade 8 students, secondary school programs are explained.

If you live in an area which has specialized secondary schools (for example, commercial, art, technical), or schools offering specialized programs (for example, programs in the French language or independent studies), further consideration should be given to individual needs and abilities.

Following are some suggestions that may be helpful in planning a program of studies.

- Examine the elementary school record. From the marks, comments, and school experiences at the elementary level, a pattern should start to emerge.
- Think about interests and skills. Students know what they are good at, what they are not good at, and what experiences they find enjoyable. They know what they read, draw, talk about, work at, and watch on television. In discussing these interests and inclinations with parents, an individual's potential should become apparent.
- Talk to the elementary school teacher, counsellor, and principal. Their ideas, knowledge, and opinions on student potential may be discussed among the parents, the student, and the school personnel.
- Do not make hasty decisions. It takes time for students to decide what direction they wish to take. Exposure to the experiences and the stimulation of secondary school, new courses, part-time jobs, volunteer work, after-school clubs, and sports is helpful in the process of decision-making.

What about selecting subjects?
The choice of subjects should be determined only partly by the student's educational and career plans. Two other aspects are worth remembering: (a) almost any life-style requires a fundamental grasp of English, mathematics, and the sciences; and there may be an increasing demand to incorporate French within the program; and (b) most people spend a considerable amount of time in recreational and leisure activities.

School is the ideal place to explore and develop interests, whether or not they lead to full-time occupations.

What about the world of work?
Students should realize that schooling may not provide them with ready-made employment opportunities. It is strongly suggested that students obtain current, up-to-date information on career and job trends and, together with their parents, guidance counsellors, and other school officials, examine the many alternatives available to them, and plan accordingly.

Career Areas Chart
The following chart lists major subject areas that are required or recommended for various careers and post-secondary programs. Although it is not a comprehensive listing, it should provide assistance in planning a school program.

Career Areas

Subjects that may be required or recommended for the careers and post-secondary programs listed

Subject	English	French	Geography
Careers or courses in	Architecture Business Administration Commerce and Finance Early Childhood Education Graphic Arts Home Economics Interior Design Journalism Radio and Television Arts Secretarial Science Theology	Airline Companies Archaeology Business Administration Commerce and Finance English Export/Import Businesses Fashion Foods History Hotel and Resort Services Interpreting Journalism Law Public Administration Shipping Translating Travel Agencies	Agriculture Business Administration Commerce and Finance Economics Foreign Trade Forestry History Meteorology Public Administration Teaching Urban and Regional Planning

History	Latin	Mathematics	Science
Anthropology Archaeology Architecture Business Administration Commerce and Finance Diplomatic Service Economics Geography Interior Design Journalism Law Music Philosophy Politics Public Administration Sociology Teaching Urban and Regional Planning	Archaeology English French Government History Law Medicine Political Science Teaching Theology	Agriculture Architecture Astronomy Business Administration Commerce and Finance Computer Science Dentistry Economics Engineering Food Sciences Forestry Graphic Arts Health Education Interior Design Law Medicine Meteorology Nursing Pharmacy Physical and Health Education Psychology Sociology Surveying Technology Veterinary Science	Agriculture Architecture Astronomy Computer Science Criminology Dentistry Engineering Fashion Food Sciences Forestry Geography Graphic Arts Home Economics Interior Design Medicine Meteorology Nursing Pharmacy Physical and Health Education Physical and Occupational Therapy Psychology Surveying Technology Veterinary Science

Post-secondary Education

Locations of colleges, (including satellite campuses), universities, and other post-secondary institutions

Colleges of Applied Arts and Technology

Barrie/Orillia/Owen Sound/Penetanguishene
Georgian College of Applied Arts and Technology

Belleville
Loyalist College of Applied Arts and Technology

Hamilton/Brantford/Stoney Creek
Mohawk College of Applied Arts and Technology

Kingston/Brockville/Cornwall
St. Lawrence College of Applied Arts and Technology

Kitchener/Cambridge/Guelph/Stratford
Conestoga College of Applied Arts and Technology

London/Simcoe/Woodstock
Fanshawe College of Applied Arts and Technology

Metropolitan Toronto
Centennial College of Applied Arts and Technology
George Brown College of Applied Arts and Technology
Humber College of Applied Arts and Technology
Seneca College of Applied Arts and Technology

North Bay
Canadore College of Applied Arts and Technology

Oakville/Brampton/Burlington/Milton/Mississauga
Sheridan College of Applied Arts and Technology

Oshawa
Durham College of Applied Arts and Technology

Ottawa/Pembroke
Algonquin College of Applied Arts and Technology

Peterborough/Lindsay/Cobourg
Sir Sandford Fleming College of Applied Arts and Technology

Sarnia
Lambton College of Applied Arts and Technology

Sault Ste. Marie
Sault College of Applied Arts and Technology

South Porcupine/Haileybury/Kirkland Lake
Northern College of Applied Arts and Technology

Sudbury
Cambrian College of Applied Arts and Technology

Thunder Bay
Confederation College of Applied Arts and Technology

Welland/Niagara Falls/St. Catharines
Niagara College of Applied Arts and Technology

Windsor/Chatham
St. Clair College of Applied Arts and Technology

Universities and Other Institutions

Guelph
University of Guelph

Hamilton
McMaster University

Kingston
Queen's University
Royal Military College of Canada

London
The University of Western Ontario

Metropolitan Toronto
Ontario College of Art
Ryerson Polytechnical Institute
University of Toronto
York University

Ottawa
Carleton University
University of Ottawa

Peterborough
Trent University

St. Catharines
Brock University

Sudbury
Laurentian University

Thunder Bay
Lakehead University

Waterloo
University of Waterloo
Wilfrid Laurier University

Windsor
University of Windsor

What's new in the post-secondary area?
There have been a number of truly startling changes here – new institutions, growing enrolments, and new courses and programs. Contemporary needs are becoming more diversified and post-secondary education is responding by providing a more diversified range of learning possibilities.

University education offers students the chance to investigate human thought in all fields of learning. The main goal of a university education is not a ready-made job; its function is to provide a place where students learn to use their abilities and to acquire self-discipline, judgement, and the capacity to think independently and to carry on the tradition of learning.

The colleges of applied arts and technology are neither universities nor extensions of secondary schools. The education provided by the colleges is mainly education for employment, preparing young people to enter the world of work, and assisting adults in preparing themselves for different or better jobs. Business and industry rely on the colleges as sources of well-qualified personnel.

Apprenticeship programs in Ontario are geared for those who wish to make a career in the skilled trades. Apprenticeship is a systematic program of training on the job and in the classroom. Apprentices work on the job under the direction of qualified tradespeople; they also receive classroom instruction, usually at the colleges of applied arts and technology, in the theoretical aspects of their trade.

What is happening at universities these days?
There are now 15 provincially supported universities in Ontario, as well as the Ontario College of Art and Ryerson Polytechnical Institute. The Royal Military College of Canada is also located in the province. Several of these universities have been built within the past 10 to 15 years.

After a decade of spectacular expansion, university enrolments are still increasing. The number of full-time students enrolled in 1976-77 was approximately 163 000, including those registered at Ryerson.

Ontario universities

University	*Location*	*Full-time enrolment 1976-77*
Brock	St. Catharines	2 610
Carleton	Ottawa	9 216
Guelph	Guelph	10 057
Lakehead	Thunder Bay	2 841
Laurentian (1)	Sudbury	3 211
McMaster	Hamilton	10 482
Ottawa	Ottawa	11 292
Queen's	Kingston	10 627
Toronto (2)	Toronto	32 499
Trent	Peterborough	2 473
Waterloo	Waterloo	14 925
Western Ontario	London	18 086
Wilfrid Laurier (3)	Waterloo	3 200
Windsor	Windsor	7 417
York (4)	Toronto	13 224
Ontario College of Art	Toronto	1 266
Ryerson	Toronto	8 938
Royal Military College	Kingston	637

(1) University of Sudbury is a federated college within Laurentian University. Other campuses are Algoma College, Sault Ste. Marie; Nipissing College, North Bay; and Collège de Hearst, Hearst.

(2) The University of Toronto has two suburban campuses: Scarborough College and Erindale College.

(3) Formerly Waterloo Lutheran University.

(4) Glendon College is a bilingual college of York University.

Most universities still demand a 60 per cent average in six Grade 13 credits as a minimum entrance requirement. Several Ontario universities now admit a few outstanding Grade 12 graduates each year. Students interested in an honours degree or in a program leading to a profession will need better-than-average marks.

Students cannot enter professional programs such as law, medicine, teaching, and library science directly from secondary school. For these programs, related undergraduate study or an undergraduate degree is a basic requirement and there are usually many more applicants than there are places.

Universities offer a lot of flexibility, individual timetabling, and freedom of choice. In today's universities there are some fascinating new courses, such as Biophysics, Communication Arts, Computer Science, Consumer Studies, Earth Sciences, Film Arts, Kinesiology, Native Studies, and Urban Studies. Many students opt for a general first year which allows them to try different subject areas before deciding on a specific field of study.

Some of the costs of attending university have increased with inflation. However, tuition fees have not risen at the same rate as other costs. Tuition fees range from about $650 to $800 in Arts and Sciences, $800 to $860 in Engineering, and $817 to $1 200 in Medicine. Fees for foreign students have been increased to $1 500 for a two-term academic year.

Residence with meals, or board and lodging now costs from $1 400 to $2 100 a year. Altogether it can cost from $2 700 to $3 300 or more for a year at university.

Many students apply to the province for financial assistance and at least two out of every five full-time students at Ontario's colleges and universities receive financial aid. See the section on Financing an Education for more details on costs and financial assistance.

For further information about Ontario universities, consult:

Horizons
Spectrum
individual university calendars
publications listed at the end of this booklet

What about teachers' colleges?
There have been many changes in this area. Most of the former teachers' colleges have become university faculties or colleges of education. Only the Hamilton and Toronto campuses of the Ontario Teacher Education College (OTEC), Nipissing College, and Laurentian University restrict their teacher training to the elementary level. The other eight university faculties of education across the province train both elementary and secondary school teachers. Students now need a university degree to enter either program.

What does Ryerson have to offer?
In addition to its diplomas and certificates, Ryerson Polytechnical Institute now offers some degree programs leading to the Bachelor of Applied Arts degree and the Bachelor of Technology degree.

For admission to most of Ryerson's diploma and certificate programs, students need Grade 12 graduation at the highest level of difficulty in the appropriate subjects; many of the degree programs require an honour graduation diploma from Grade 13.

What changes have occurred in the Ontario College of Art?
The college has modernized its programs, attracted much public interest, and now has an enrolment of over 1 250. OCA awards its graduates a four-year diploma as a college associate. The OCA diploma is widely recognized in the world of design and commercial art. For admission, students need at least a Secondary School Graduation Diploma from Grade 12 and an art portfolio.

What other avenues lead to university?
Some universities do consider accepting secondary school applicants before they have completed their SSHGD. There are also universities who accept secondary school graduates who complete Grade 13 in a semestered school making them ready for admission in January.

Admission to university after completing the Grade 12 diploma
Some universities do admit highly qualified Grade 12 graduates into a first-year program. However, the number of Grade 12 graduates admitted is very limited and these students must attend a special summer session which prepares them for first-year university studies.

Admission to university in a preliminary year
A preliminary year at university is a year of studies which replaces Grade 13 at a secondary school. It is open only to highly qualified Grade 12 graduates who, for certain reasons, do not wish to complete Grade 13 but would rather study in a university setting before starting the first-year program.

Four universities now offer this preliminary year. Carleton, Ottawa, Windsor, and Brescia College, an affiliate of the University of Western Ontario.

January admission to university
Some students who complete Grade 13 in a semestered secondary school will be ready for admission to university in January. January admission is available in certain universities and in certain undergraduate programs of study. Some programs are simply not adaptable to January admission as the student is "out of phase" with the others in the program and cannot always take the required courses at the right time.

These, however, are not the normal routes which lead to university. Parents and students should consult principals and guidance counsellors for information and advice.

What do the community colleges offer?
The colleges of applied arts and technology (CAATs) present one of the most exciting changes on the Ontario educational scene. Since 1965 the province has developed 22 colleges with campuses in large and small communities. They offer over 2 000 programs in such areas as business, technology, applied arts, and health sciences. The community colleges train people for jobs and have been very successful in finding employment for their graduates in industry, business, and government.

This year the CAATs expect an enrolment of 60 000 full-time students in certificate and diploma programs, in addition to apprenticeship, manpower training, and various short-term programs. Part-time enrolment in courses geared to the needs and interests of young people and adults in the community is now approaching 200 000.

The colleges have an essentially open-door admission policy. Eligible applicants for admission to full-time college diploma programs include:

- holders of a Secondary School Graduation Diploma obtained at the end of Grade 12 (27 credits);
- holders of a Secondary School Honour Graduation Diploma obtained upon completion of Grade 13;
- those who have attained the age of 19 years on or before the date of commencement of the program of instruction in which they plan to enrol.

For some programs personal interviews may be required. Upgrading courses are provided by the colleges for people 19 years of age and older who lack the minimum qualifications to enter programs of their choice. They are helped to achieve the required background studies as quickly as possible.

In 1973, diploma Nursing Education was transferred from Ontario's teaching hospitals and regional schools of nursing to community colleges and the Ryerson Polytechnical Institute. Over 7 000 nurses-in-training now take their academic subjects in a college setting to supplement their clinical practice in hospitals. Applicants need at least Grade 12 graduation with two senior Science credits. Graduates of the two-year college programs take the registration examinations of the College of Nurses of Ontario. Other health sciences programs provide training for nursing assistants, medical laboratory technicians, radiological technicians, dental hygienists, bio-medical equipment technicians, emergency casualty attendants, medical records technicians, mental retardation counsellors, pharmacy assistants, and many others. These courses are usually run by community colleges in co-operation with hospitals and other agencies.

Annual tuition fees range between $325 to $555 depending on the program. Foreign student fees are $750 for a two-term academic year.

Colleges of applied arts and technology

College	*Main campus*	*Other campuses*	*Full-time post-secondary enrolment 1976-77*
Algonquin	Ottawa	Pembroke Perth	6 583
Cambrian	Sudbury		1 497
Canadore	North Bay		1 004
Centennial	Scarborough (Metro Toronto)		3 046
Conestoga	Kitchener	Cambridge Clinton Guelph Harriston Stratford	2 119
Confederation	Thunder Bay		1 267
Durham	Oshawa		1 113
Fanshawe	London	Simcoe Woodstock	4 828
George Brown	Toronto		3 034
Georgian	Barrie	Orillia Owen Sound Penetanguishene	1 456
Humber	Etobicoke (Metro Toronto)		5 938
Lambton	Sarnia		775
Loyalist	Belleville		1 168
Mohawk	Hamilton	Brantford Stoney Creek	4 118
Niagara	Welland	Niagara Falls St. Catharines	2 397
Northern	South Porcupine	Haileybury Kirkland Lake	658
St. Clair	Windsor	Chatham	2 942
St. Lawrence	Kingston	Brockville Cornwall	2 745
Sault	Sault Ste. Marie		1 042
Seneca	North York (Metro Toronto)	King City	4 937
Sheridan	Oakville	Brampton Burlington Milton Mississauga	3 823
Sir Sandford Fleming	Peterborough	Cobourg Lindsay	2 057

What is apprenticeship training?
In Ontario, industry and government work together to provide apprenticeship training for those who wish to make a career in the skilled trades. Apprenticeship programs combine training on the job with classroom learning. They are practical, job-oriented, and financially rewarding. The apprentice gets paid while learning the basics of the trade. The employer provides training and the apprentice is expected to do the job as well as possible.

Apprenticeship training is available in more than 300 construction, motive power, and service and industrial trades. These programs are open to students 16 years of age and over, and usually begin after Grade 10 or Grade 12. A minimum of 14 credits is normally required. Most students wishing to become apprentices in such areas as auto mechanics, plumbing, electrical or machine trades should have 27 secondary school credits. Technical subjects such as Machine Shop, Drafting, Electronics, Auto Mechanics, and Construction that prepare students for skilled trades are available in programs leading to the Secondary School Graduation Diploma.

During the apprenticesnip training program, the apprentice is contracted to a qualified tradesperson. It is up to the apprentice to find the job and apprentice position. Jobs are scarce in many trades these days and, depending on the trade you wish to work in, it may be difficult to find an apprenticeship opening. Because of the shortage of places, students may have to be put on a waiting list.

Depending on the trade, the apprenticeship period varies from two to five years. The time of the apprenticeship can be reduced for secondary school technical credits achieved as well as for academic credits that are beyond the entry level (either 14 or 27 secondary school credits). During the training period, there are generally two periods of in-school sessions taken at the nearest college of applied arts and technology.

Upon successful completion of training and the trade examinations, an apprentice will receive a Certificate of Apprenticeship. This certificate indicates that the holder's skills meet Ontario standards. In certain trades, a high mark allows the holder to add an Interprovincial Red Seal to the certificate. The Red Seal indicates that the trade qualifications are acceptable across Canada.

In some trades, a Certificate of Qualification must be obtained; in others, certification is voluntary. Certificates of Qualification are granted without further examination to the holders of Certificates of Apprenticeship. The compulsory Certificates of Qualification must be renewed every two years; the voluntary certificate need not be renewed. The Interprovincial Red Seal may also be placed on a Certificate of Qualification.

For further information about apprenticeship training, check with your high school guidance office or write to:

Industrial Training Branch
Ministry of Colleges and Universities
558 Yonge St., 2nd Floor
Toronto, Ontario M4Y 1Z1

Are there many specialized programs offered in other kinds of post-secondary institutions across the province?
In addition to the Ontario Agricultural College at the University of Guelph, Ontario has four colleges of agricultural technology, some of which may be new to you. They offer such courses as Agri-business, Animal Health Technology, Home Economics, and Agricultural Laboratory Technology. They include:

- *Centralia* (established in 1967), located on the grounds of the former air force base north of London, has a two-year program for students in central and mid-western Ontario.
- *Kemptville* (established in 1917) is the oldest agricultural college and for years was the only school of its kind in Ontario. Situated south of Ottawa, it serves eastern Ontario and the Ottawa and St. Lawrence valleys.
- *New Liskeard* (established in 1967) was set up to serve the unique agricultural needs of northern Ontario. It is situated about 160 kilometres north of North Bay and is on the edge of the Clay Belt.
- *Ridgetown* (established in 1951), located near Chatham, serves the area of southwestern Ontario and the Lake Erie shore. This college offers a new Agricultural Secretary course for farm record-keeping.

The Niagara Parks Commission School of Horticulture at Niagara Falls has been training apprentice gardeners and horticulturalists since 1936. Students acquire practical knowledge, skill, and training in general horticulture, including Botany, Arboriculture, Floriculture, and Landscape Art.

The Canadian Memorial Chiropractic College, Toronto, offers a four-year program which leads to graduation as a Doctor of Chiropractic. For admission, students must have completed Grade 13 and, in addition, need one year of university standing with courses in Biology, Chemistry, and Psychology.

The Toronto Institute of Medical Technology (Toronto) offers two-year programs in Medical Laboratory Technology and in Radiological Technology. For entrance to the Medical Laboratory Technology program, students need Grade 13 graduation with appropriate Science options. For the Radiological Technology program, students need Grade 12 graduation with appropriate Science options.

Are there any other training programs?
Many professional associations within the business community offer special programs to upgrade the skills of their members. These include:

- Association of Ontario Land Surveyors
- Canadian Institute of Traffic and Transportation
- Certified General Accountants' Association of Ontario
- Institute of Canadian Bankers
- Institute of Chartered Accountants of Ontario
- Institute of Chartered Secretaries and Administrators
- Life Underwriters' Association of Canada
- Real Estate Institute of Canada
- Society of Industrial Accountants of Ontario

A specialized form of training is provided by the Ministry of Transport Air Services School in Ottawa. It prepares trainees for such aviation careers as air traffic controller, meteorologist, and radio operator. Flight attendants, including stewards and stewardesses are normally trained by the major airlines.

The Canadian Government is actively involved in personnel training in many areas. Opportunities range from the Armed Forces programs of the Department of National Defence and the Canadian Coast Guard Officers' Cadet Training of the Ministry of Transport to adult retraining programs offered by Canada Manpower at Ontario's community colleges. More information about careers in the Armed Forces or the Canadian Coast Guard can be obtained from the nearest recruiting office of the Canadian Armed Forces.

For information on manpower retraining, contact the Canada Manpower office in your area or write to:

Information Resources Branch
Ministry of Colleges and Universities
Mowat Block, Queen's Park
Toronto, Ontario M7A 1B8

What about private vocational schools?
A large number of private vocational or trade schools offer a variety of skill training courses, both in residence and by correspondence. These schools, supported by students' fees, must be registered under the Private Vocational Schools Act, 1974.

A catalogue of private vocational registered schools is available from:

Information Resources Branch
Ministry of Colleges and Universities
Mowat Block, Queen's Park
Toronto, Ontario M7A 1B8

Is that all?
Not quite. Correspondence courses and evening programs leading to diplomas and degrees, upgrading programs for adults at community colleges, staff training by government, business, and industry, specific skills taught by private schools – all these programs now offer at least as much flexibility as has been achieved at the secondary school level.

As more adults return to the work force or undertake further training, and as more people seek personal fulfillment through further education and career opportunities, we can expect greater development in these programs in the future.

Financing an Education

Is financial assistance available to help students complete high school?
Some school boards provide modest assistance to high school students whose families are in financial need.

The province also provides help in the form of $100 Ontario Secondary School Bursaries to needy students in their final year of high school. Such bursaries are awarded on the recommendation of the principal or guidance head.

Many companies, service clubs, veterans' groups, and other organizations offer awards or bursaries for students. A large number of average students are helped in this way. You can find out about such awards from secondary school guidance counsellors.

How do students meet the costs of post-secondary education?
Financing an education after high school can pose a real problem to many students. Some get help from parents; some work part-time; some get loans and grants. Most students use summer job savings to help pay their way or to supplement other assistance. Secondary school students planning to attend college or university are well advised to start saving a few years ahead of time.

For students going on to post-secondary education possible sources of financial assistance include:

- *Scholarships:* Outstanding students are eligible for scholarships which are based primarily on academic achievement. Financial need is not normally a factor. The student awards office of the post-secondary institution can provide information on the scholarships offered.
- *Ontario Student Assistance Program (OSAP):* this program is intended to help students who need financial assistance to further their education. Academic excellence is not a primary qualification. About two out of five post-secondary students in Ontario receive financial assistance through the Ministry of Colleges and Universities. An evaluation of family financial circumstances is necessary in order to decide who should get help and how much. Effective September 1978, OSAP will have four component plans. Students will be eligible to apply for a grant from the Ontario Study Grant Plan, and for additional loans through the Canada Student Loans Plan or the Ontario Student Loans Plan. Particularly needy part-time students will be able to apply for non-repayable bursaries from the Ontario Special Bursary Plan. Repayment of the loans, with interest, does not begin until six months after the student graduates or drops out.

Can students combine work and school?
More students are now alternating periods of work with periods of school. Many post-secondary students get summer jobs. Some work part-time during the academic year. Some alternate work and study periods in co-operative programs offered by a few colleges and universities. The University of Waterloo, Fanshawe College in London, and Mohawk College in Hamilton are examples.

Arrangements exist which help the student who wishes to alternate work and study. For instance, the University of Guelph has a trimester system with entry points in September, January, and April. Carleton University, the University of Waterloo, and York University also admit students in January. The maturity and experience gained through alternating study and work periods generally proves beneficial.

Selected Reference Publications

Some of these publications will be available in secondary school guidance offices, public libraries, and at college and university admissions offices and libraries. Specific sources are listed below.

Careers

Career Selector *Free*
Data on over 100 careers – nature of work, training, qualifications, remuneration, etc.

Women's Bureau
Ministry of Labour
400 University Avenue
Toronto, Ontario M7A 1T7

Careers Updated *$1.50*
Career information on 17 categories including business and public service.

Ontario Education Research Council
1260 Bay Street, 6th Floor
Toronto, Ontario M5R 2B1

Occupational Information Monographs *58¢*
Individual monographs on some 150 careers are available at 58¢ per copy. Checklist free on request.

Guidance Centre
Faculty of Education
University of Toronto
1000 Yonge Street
Toronto, Ontario M4W 2K8

Student Guidance Information Service (SGIS)
Career information is available in all secondary schools and Grades 9 and 10 of the separate schools for reference purposes. See the guidance office.

University and Community College Career Outlook *Free*
Basic information on college and university programs and their related careers.

Manpower Information and Analysis Branch
Program Development Service
Employment and Immigration
Ottawa, Ontario K1A 0J9

Educational

Students and parents are strongly advised to request calendars from individual colleges and universities to determine specific entrance requirements. The following offer information of a more general nature.

Accredited Institutions of Higher Education *$8.50*
Annual listing of accredited colleges and universities in the United States.

American Council on Education
One Dupont Circle
Washington, D. C. 20035

Apprenticeship and You/ L'apprentissage et vous *Free*

Industrial Training Branch
Ministry of Colleges and Universities
558 Yonge Street
Toronto, Ontario M4Y 1Z1

Colleges of Applied Arts and Technology Programs (CAAT Chart) *Free*
Comprehensive listing of programs at Ontario community colleges in chart form.

Information Resources Branch
Ministry of Colleges and Universities
Mowat Block, Queen's Park
Toronto, Ontario M7A 1B8

Directory of Registered Private Vocational Schools *Free*
Partial list of courses offered by registered private vocational or trade schools in Ontario.

Information Resources Branch
Ministry of Colleges and Universities
Mowat Block, Queen's Park
Toronto, Ontario M7A 1B8

Higher Education in the United Kingdom *$5.50*
A handbook for students from overseas and their advisers.

Longman Canada Limited
55 Barber Green Road
Don Mills, Ontario M3C 2A1

Horizons *Free*
Guide to post-secondary education in Ontario – admission requirements, fees, courses offered, etc.

Information Resources Branch
Ministry of Colleges and Universities
Mowat Block, Queen's Park
Toronto, Ontario M7A 1B8

Native Studies in Colleges and Universities *Free*
A guide to courses in Native Studies offered in Ontario beyond the secondary-school level.

Information Resources Branch
Ministry of Colleges and Universities
Mowat Block, Queen's Park
Toronto, Ontario M7A 1B8

Spectrum *$2.50*
Basic information on colleges, universities, and other educational institutions in Ontario.

Guidance Centre
Faculty of Education
University of Toronto
1000 Yonge Street
Toronto, Ontario M4W 2K8

Student Guidance Information Service (SGIS)
Educational information is available in computer printouts for reference in all secondary schools and Grades 9 and 10 of the separate schools. See the guidance office.

Tour d'horizon *Gratuit*
Guide de l'éducation postsecondaire en Ontario à l'intention des Franco-ontariens – conditions d'admission, droits de scolarité, cours dispensés, etc.

Direction de l'information
Ministère des Collèges et Universités
Édifice Mowat, Queen's Park
Toronto, Ontario M7A 1B8

Universities and Colleges of Canada *$7.00*
Contains basic information on 70 universities and their affiliated colleges. Includes a listing of research institutes; a listing of community colleges; and a comprehensive table of university programs. Send payment with order to:

Publications Distribution Unit
Statistics Canada
Ottawa, Ontario K1A 0Z5

Financial Aid

Bursaries for Secondary School Students *Free*
Bilingual brochure outlining assistance to needy secondary school students for final year studies.

Information Systems and Records Branch
Ministry of Education
Mowat Block, Queen's Park
Toronto, Ontario M7A 1L2

Ontario Student Assistance Program *Free*
Information on the Ontario Study Grant Plan, Ontario Student Loan Plan, Canada Student Loan Plan, and the Ontario Special Bursary Program is available from:

Student Awards Branch
Ministry of Colleges and Universities
8th Floor, Mowat Block
Queen's Park
Toronto, Ontario M7A 2B4

Second Language Bursary and Fellowship Programs *Free*
Brochures and applications for a variety of assistance programs to encourage minority language teaching and study.

Student Awards Branch
Ministry of Colleges and Universities
Mowat Block, Queen's Park
Toronto, Ontario M7A 2B4